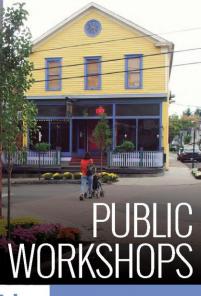
Corridor Management Plan



Mark Debald, PDCTC John Canning, VHB Susan O'Donnell, VHB Bob Dennison, VHB





Upper Route 9G Corridor Management Plan

Poughkeepsie-Dutchess County Transportation Council (PDCTC), the designated Metropolitan Planning Organization for Dutchess County, is working on a Corridor Management Plan for NYS Route 9G from CR 78 (Broadway/West Kerley Corners Road) in the Village of Tivoli to NYS Route 199 in the Town of Red Hook. The study area also includes CR 103/ Annandale Road through Bard College and CR 78/Broadway through Tivoli. Join us at one of the Public Workshops to learn more about the findings and recommendations from the project and to provide your feedback.

Whb

Join us at one of the Public Workshops!

Workshop 1: Wednesday May 11: 12 - 2pm @ Bard College, Bertelsmann Campus Center,

Workshop 2: Thursday May 12: 6:30 - 8:30pm Tivoli Village Hall, 86 Broadway: 3rd Floor Meeting Room

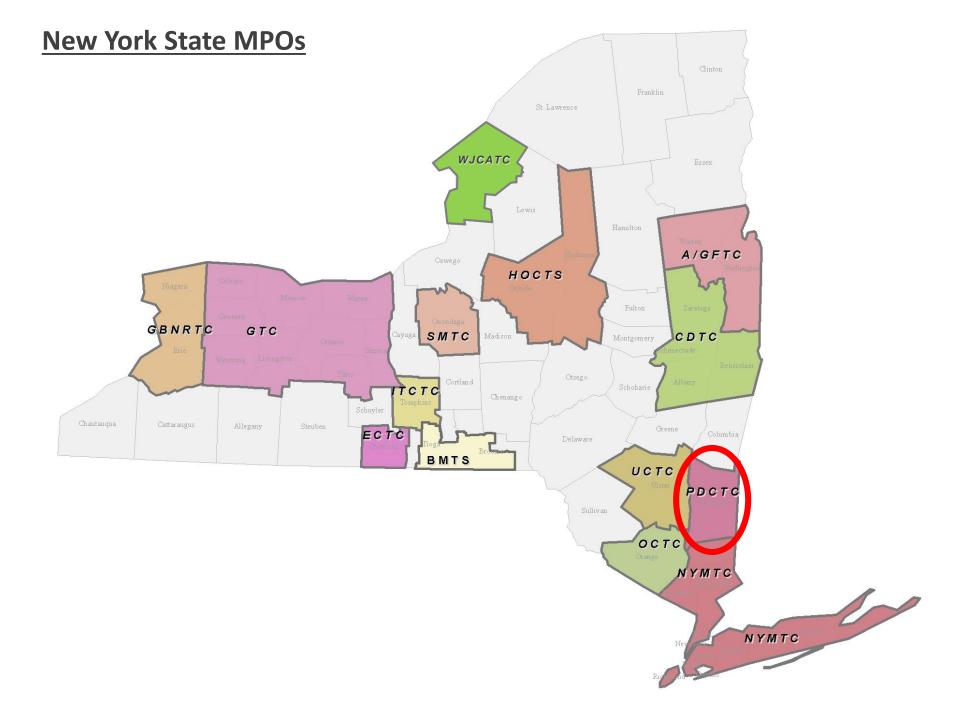


Project Introduction

Poughkeepsie-Dutchess County Transportation Council

Who We Are:

- Designated Metropolitan Planning Organization (MPO) for Dutchess
 County
- Established in 1982
- Required by the federal government for Urbanized Areas of 50,000+ population
- Forum for establishing transportation policies and priorities
- Programs federal highway and transit funding through a locally driven,
 comprehensive planning process
- Assists communities with local transportation planning needs



PDCTC Voting Membership

Permanent Members

Dutchess County Executive, Permanent Chairperson

NYSDOT Commissioner

Metropolitan Transportation Authority Chairperson

City of Beacon Mayor

City of Poughkeepsie Mayor

Town of Beekman Supervisor

Town of East Fishkill Supervisor

Town of Fishkill Supervisor

Town of Hyde Park Supervisor

Town of LaGrange Supervisor

Town of Poughkeepsie Supervisor

Town of Wappinger Supervisor

Partially Urbanized Towns (Rotating)

Town of Pawling Supervisor

Town of Pleasant Valley Supervisor*

Town of Union Vale Supervisor

Urbanized Villages (Rotating)

Village of Fishkill Mayor
Village of Pawling Mayor*
Village of Wappingers Falls Mayor

Non-Urban Towns (Nominated)

Town of Clinton Supervisor
Town of Pine Plains Supervisor

^{*} Current voting member.

PDCTC Planning Projects

- Route 9 Land Use & Transportation Study (2009)
 - ⇒Pedestrian underpass at Marist College
- CR 93 Corridor Management Plan (2011)
 - ⇒Traffic analysis and recommendations
- Hyde Park Sidewalk Study (2013)
 - ⇒Route 9 sidewalk improvements
- Transit Development Plan (2009)
 - \Rightarrow New bus routes and schedules
- Dutchess County Bus Expansion Study (2013)
 - ⇒Strategy to expand DCPT service in Poughkeepsie



Overview of Corridor Management Plan

CLAY HILL RD TIVOLI VILLAGE 96 **RED HOOK** Tivoli Bays CRUGER ISLAND RD MANOR AV Bard College 6 WHALESBACK RD HARVARD ST PRINCETON ST **Montgomery Place** 9G RED HOOK VILLAGE 9 199 TION HILL RD **0** Study Intersection 0.4 Miles

Upper Route 9G Study Area





Crash History

Historic Crash Records (2009-2013)

- Approximately 250 crashes over 5 years
- Five fatalities in three crashes:
 - 1. Jan. 2012 on Rt 9G at CR 78/Broadway
 - 2. Sept. 2013 on Rt 9G at CR 78/Broadway
 - 3. Oct. 2009 on CR 103/Annandale Rd near River Rd



- 1. Two pedestrian fatalities in one crash on Route 9G at CR 78/Broadway
- 2. One fatality in a 'T-bone' crash at Route 9G & CR 78
- 3. One fatality when a motorist lost control on Route 9G and struck a fixed object





Corridor Management Plan

Purpose

To identify short- and long-range recommendations to improve vehicular and non-vehicular safety and mobility.





Corridor Management Plan

Project Status

- Reviewed previous studies
- Inventoried the roadways
- Collected extensive traffic, pedestrian, bicycle, speed and crash data
- Conducted a Road Safety Audit (RSA) with responsible agencies
- Analyzed the data to evaluate safety, operational and capacity concerns
- All detailed in Tech Memos 1 4 which have been posted online
- Identified draft recommendations and prepared Tech Memo 5





Corridor Management Plan

Presentation Format

- Almost 50 recommendations (not counting repairs to be addressed through maintenance)
- Developed with a Technical Advisory Committee (TAC)
- Grouped by location: Area-wide; Trails; CR 78; CR 103; NY 9G; Transit
- Available online at http://www.dutchessny.gov/pdctc.htm
- Tech Memo 5 also available at the break-out tables
- Presenting recommendations by location, followed by discussion
- Looking for public input and support

There will be time after the presentation to discuss the recommendations at smaller tables with members of the TAC.

	Overall Study Area Improvements – Education, Enforcement, Planning & Design
	Ongoing
A-1	Make more frequent use of portable driver speed feedback devices. Education & Targeted Enforcement
A-2	Host annual Safety Education campaigns for all corridor users at the start of the school year.
A-3	When approving new or retrofitted development projects consider all users (Complete Streets)
A-4	Incorporate Dutchess County Planning Department's Greenway Guides design principals
	Mid-Term (2 to 5 years)
A-5	Consider supplementing the existing speed limit signs with permanent driver-feedback speed limit signs.
	Trails & Shared-Use Paths
	Mid-Term (2 to 5 years)
P-1	Add a pedestrian-bicycle facility between Bard Campus and newly-acquired Montgomery Place.
P-2	Develop a trail through the Tivoli Bays Management Area connecting Bard with Tivoli.
	Long-Term (6 to 10 years)
P-3	Construct an off-street shared-use path from Montgomery Place to Barrytown Road/UTS.
P-4	Widen the existing 6-foot wide shared use path through Bard College to a minimum of 10 feet.
	Transit
	Mid-Term (2 to 5 years)
T-1	Install bus stop shelters with maps and schedules at bus stops within the study area.
T-2	Adjust service in response to ridership on the Dutchess County Public Transit Loop and the Bard Shuttle.

CR 103 Corr		
		Mid-Term (2 to 5 years)
	C-1	Reclassify CR 103 from an Urban Major Collector to an Urban Minor Collector.
	C-2	Develop an improved wayfinding signing plan for Bard College.
	C-3	Assess pedestrian crosswalks along CR 103 (Annandale Rd) on the Bard campus for optimal location.
	C-4	Consider installing Rectangular Rapid Flashing Beacons (RRFBs) at Bard campus CR 103 crossings.
Long-Term (6 to 10 years)		Long-Term (6 to 10 years)
	C-5	Consider reducing the speed on CR 103 (Annandale Rd) from Barrytown Road to River Road to 35 mph.
	C-6	Incorporate traffic calming elements along CR 103 (thru Bard to encourage lower vehicle speeds).
	C-7	Extend the sidewalk along CR 103 from Campus Road to Route 9G.
CR 103 & C		CR 103 & Cruger Island Road
	C-8	Evaluate options for reconstructing the intersection as a perpendicular T-intersection.
		CR 103 & River Road Triangle
	8-1	Consider reconfiguring the River Road triangle into a standard "T" intersection/ Signal/Roundabout

	cou	CR 78 Corridor-wide Improvements
		Mid-Term (2 to 5 years)
D-1 Add a guiderail on the south side of Broadway, west of Dock Road.		Add a guiderail on the south side of Broadway, west of Dock Road.
	D-2	Extend the sidewalk on one side of Broadway from Pine Street to the river.

LEGEND

Immediate term (within 1 year) Mid-term (2 to 5 years) Long-term (6 to 10 years) Ongoing or from Mid-term to Long-term







Recommendations

(Upper 9G Corridor Management Plan)

9	G (Opper 9G Corridor Management Plan)
·	NYS Route 9G Corridor-wide Improvements
	Immediate Term (within 1 year)
B-1	Assess the needs and benefits of reducing the speed limit to 45 mph from CR 78 to NY 199
	Mid-Term (2 to 5 years)
B-2	Install roadside delineators along curved roadway sections.
B-3	Consolidate existing signing along NYS Route 9G to reduce sign clutter.
B-4	Upgrading existing guiderail and end treatments as necessary based on accident history and code.
B-5	Install a bicycle warning sign and an "In Lane" sign plaque (a "Narrow Lane assembly") along Route 9G
	Long-Term (6 to 10 years)
B-6	Incorporate traffic calming elements at key locations to encourage motorists to reduce their speed.
B-7	Provide 11-foot travel lanes with 4-foot (or wider) shoulders, where feasible.
	NYS Route 9G Intersection Improvements
	Route 9G & CR 78 (W. Kerley Corners Road)
	Immediate Term (within 1 year)
2-1	Improve the profile and alignment of the CR 78 westbound approach to Route 9G to improve sight lines.
2-2	Better delineate the intersection to reduce speeds through it.
2-3	Supplement the intersection warning sign on NB NYS 9G with a flashing beacon assembly.
2-4	Reduce the speed limit on CR 78 from 55 mph to 45 mph approaching NY 9G.
	Mid-Term (2 to 5 years)
2-5	Improve the lighting at the intersection to provide better visibility.
2-6	Assess the effectiveness of the flashing signal and larger stop signs.
2-7	Study installing a full traffic signal or roundabout, based on safety issues.
2-8	Evaluate the feasibility of reducing the grade/profile on NY Route 9G immediately south of CR 78.
2-9	Evaluate zoning and land use planning near the intersection to accommodate increased pedestrian use.
	Route 9G & Kidd Lane
	Mid-Term (2 to 5 years)
3-1	Evaluate the safety of the existing passing lane on Route 9G and request removal if warranted for safety.
	Route 9G & CR 79 (Budds Corners Road)
	Immediate Term (within 1 year)
4-1	Evaluate the need and benefit of reducing the speed limit on CR 79 from 55 mph to 45 mph.
	Long-Term (6 to 10 years)
4-2	Reconstruct the intersection of CR 79 and NYS Route 9G as a perpendicular T-intersection.
	Route 9G & CR 103 (Annandale Road)/Old Whalesback Road
	Mid-Term (2 to 5 years)
5-1	Study the justification for the installation of a traffic signal or a Rapid Rectangular Flashing Beacon (RRFB).
5-2	Install sidewalks on the north side of Old Whalesback Road from NY 9G to Whalesback Road.
	Route 9G & Bard College Entrance Road
	Immediate Term (within 1 year)
6-1	Add "Bard College Entrance Ahead" sign (or similar) along NYS Route 9G north and southbound.
	Mid-Term (2 to 5 years)
6-2	Improve safety crossing on NY 9G at the Entrance Road with a flashing beacon, a traffic signal or a HAWK.
	Route 9G & River Road/Kelly Road
7.	Immediate Term (within 1 year)
7-1	Install "No Turn on Red" signs on eastbound River Road and westbound Kelly Road at NYS Route 9G.
7-2	Evaluate the northbound pavement skid resistance and improve, if necessary.

7-3 Improve the grade crossing from Kelly Road to River Road and modify signal clearances, as needed.

LEGEND

LULIAD			
	Immediate term (within 1 year)		
	Mid-term (2 to 5 years)		
	Long-term (6 to 10 years)		
	Ongoing or from Mid-term to Long-term		



Implementation Recommendations Key Map Schedule CLAY HILL RD **Immediate** TIVOLI VILLAGE (< 1 year) **CR 78** Mid-term Corridor (1-5 years) Longer-term KIDD LN Hudson (6-10 years) River 9_G Continuing/ Ongoing RED HOOK (P-2) Tivoli Bays Areawide Route 9G Corridor CRUGER-ISLAND RD A-5) (5-2 **A-3** PITCHER LA Bard College (B-6) (6-1) 6-2 **CR 103** Corridor HARVARD ST PRINCETON ST to **(C-4)** Montgomery Place 8-1-87 **Transit** 9G BARRYTOWN RD 9 199 WILDEYRD RED HOOK VILLAGE Bard College Thb 10 0.2 0.4 Miles

Review of Recommendations

Overall Study Area

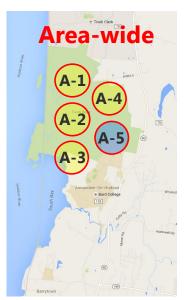
Implementation Schedule

Immediate (< 1 year)

Mid-term (1-5 years)

Longer-term (6-10 years)

Continuing/ Ongoing





Area-Wide Recommendations

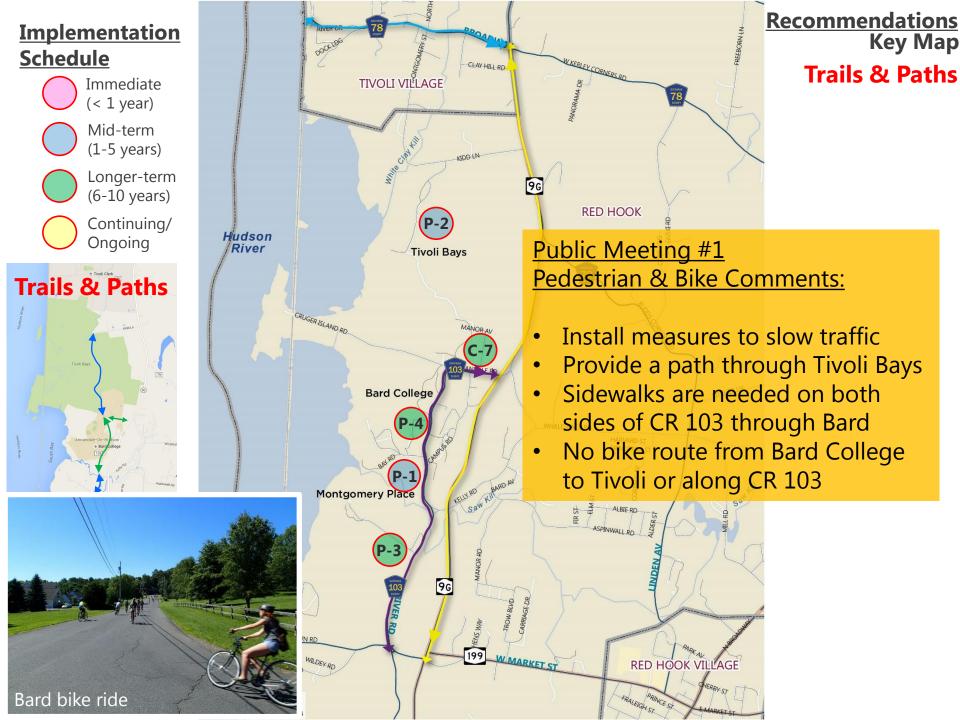
- **A-1** Targeted Enforcement & Portable Speed Feedback Devices
- **A-2** Annual Road Safety Awareness Campaign
- **A-3** Implement Complete Street Design Principles
- **A-4** Incorporate Dutchess County Planning Dept.'s Greenway Guides Principles:
 - Building Placement
 - Narrow streets in hamlet centers
 - Development in existing centers
 - Street trees
 - Bicycle Plans
 - Consolidated driveways
 - Shared parking
 - Rural feel for low volume roads
- **A-5** Consider permanent driver-feedback speed signs





Engineering, Education, & Enforcement

Trails & Paths



Trails & Paths

- **P-1** Pedestrian-bicycle facility to connect Bard Main Campus to Montgomery Place
- **P-2** Pedestrian-bicycle facility to connect Bard Main Campus to Village of Tivoli, through Tivoli Bays
- **P-3** Pedestrian-bicycle facility to connect Montgomery Place to Barrytown Road/UTS



CR 78 (Broadway)

Implementation Schedule

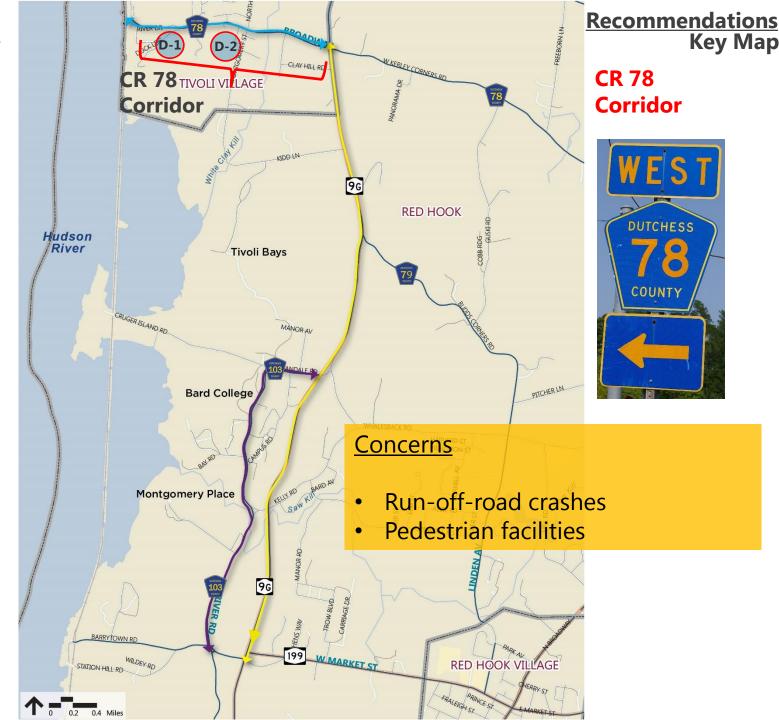
Immediate (< 1 year)

Mid-term (1-5 years)

Longer-term (6-10 years)

Continuing/ Ongoing





CR 78 Corridor-Wide Recommendations

- **D-1** Add a guide rail on the south side of Broadway west of Dock Road
- **D-2** Extend a sidewalk on one side of Broadway from Pine St to the River



CR 103

Implementation Schedule

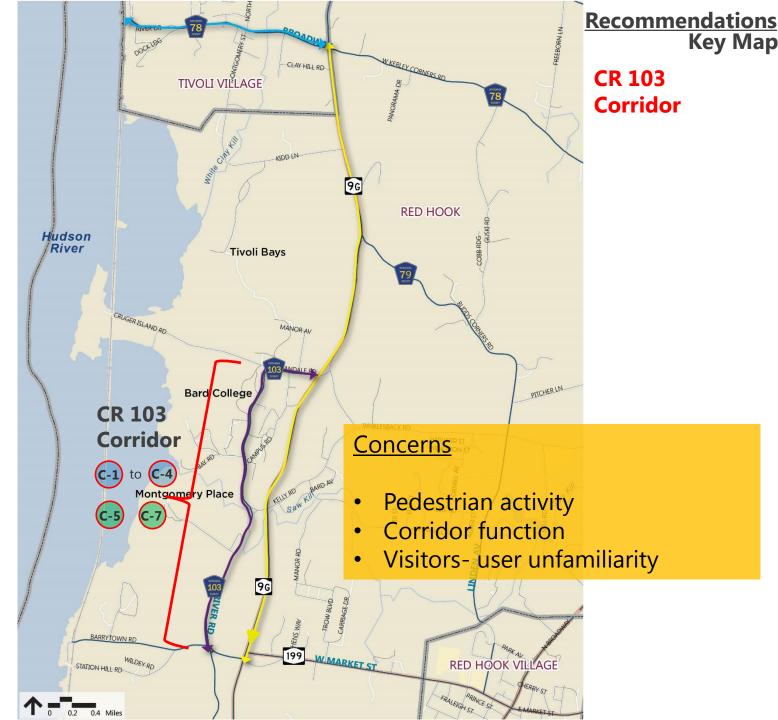
Immediate (< 1 year)

Mid-term (1-5 years)

Longer-term (6-10 years)

Continuing/ Ongoing





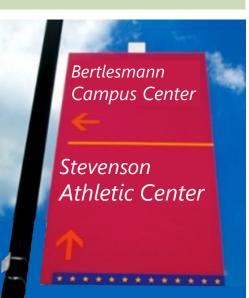
Key Map

CR 103 Corridor-Wide Recommendations

- **C-1** Request CR 103 be reclassified as a lower-volume, lower-speed Urban Minor Collector roadway
- **C-2** Develop improved wayfinding signing for Bard College
- **C-3** Re-evaluate pedestrian crosswalk locations/design to optimize efficiency & safety
- **C-4** Consider installing RRFBs between North and South Campus Roads
- **C-5** Consider reducing speed limit to 35 mph south of the Saw Kill Creek
- **C-6** As part of the Bard Master Plan, incorporate such traffic calming elements as:
 - Raised pavement
 - Curb bumpouts
 - Width reduction







Implementation Schedule

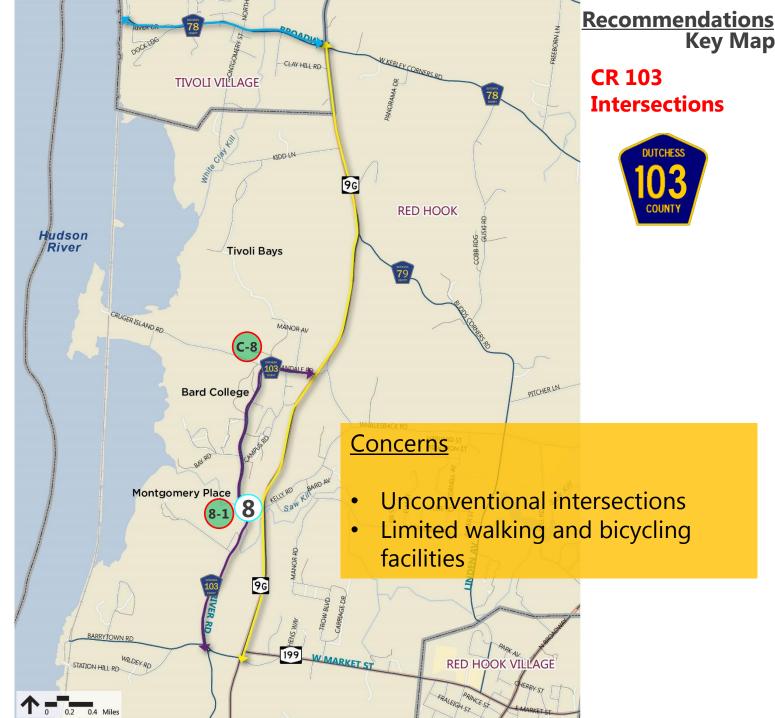
Immediate (< 1 year)

Mid-term (1-5 years)

Longer-term (6-10 years)

Continuing/ Ongoing

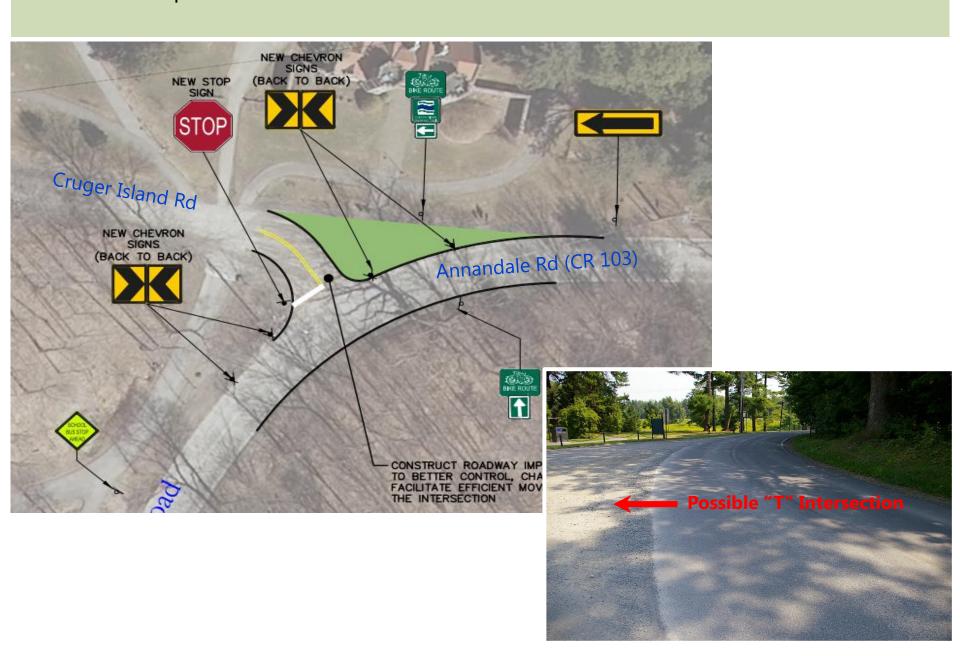




Key Map

CR 103 Intersection Recommendations: Cruger Island Rd

C-8 Evaluate options to reconstruct the intersection as a traditional "T"



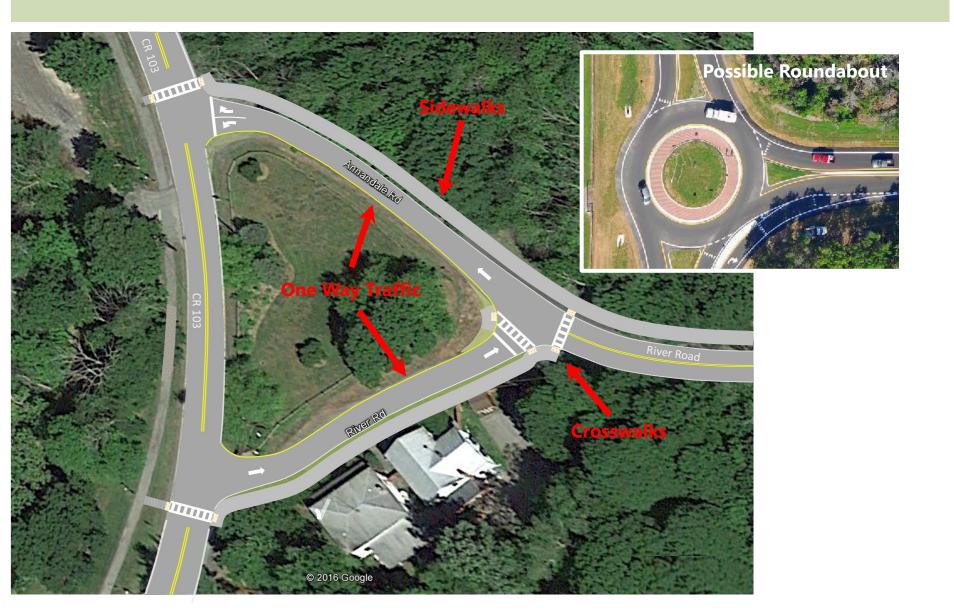
CR 103 Intersection Recommendations: River Rd

8-1 Evaluate options to reconstruct the intersection as a traditional "T" with traffic signal, roundabout or possible alternative configuration



CR 103 Intersection Recommendations: River Rd

8-1 Evaluate options to reconstruct the intersection as a traditional "T" with traffic signal, roundabout or possible alternative configuration



NYS Route 9G

Implementation Schedule

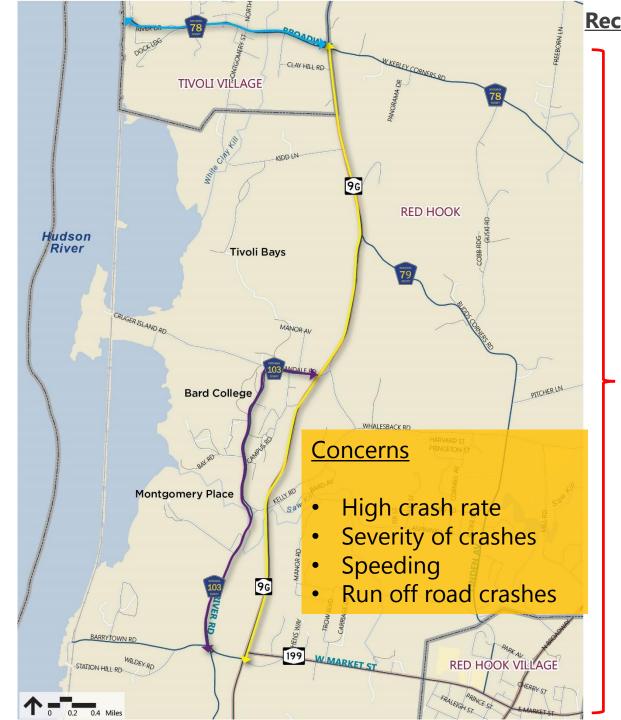
Immediate (< 1 year)

Mid-term (1-5 years)

Longer-term (6-10 years)

Continuing/ Ongoing





Recommendations Key Map

Route 9G Corridor









NYS Route 9G Corridor-Wide Recommendations

- **B-1** Consider reducing speed limit to 45 mph corridor-wide
- **B-2** Consider installing roadside delineators on curves
- **B-3** Consider consolidating signs on NY 9G to reduce clutter
- **B-4** Evaluate the need to upgrade existing guiderail and end treatments to current standards or add new guiderail
- **B-5** Install Deer and Bicycle warning signs
- **B-6** Install traffic calming to alert drivers that active section of the corridor requiring lower speeds
- **B-7** Seek to provide 11' vehicle lanes and 4' shoulders







Implementation Schedule

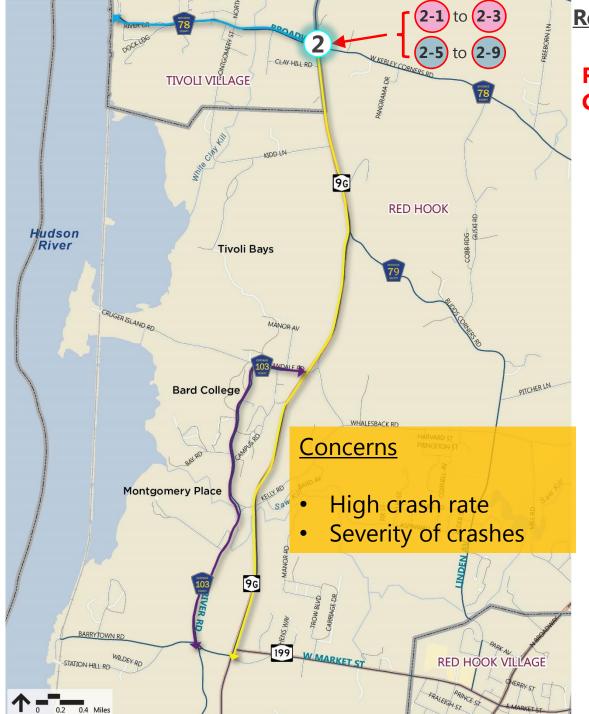
Immediate (< 1 year)

Mid-term (1-5 years)

Longer-term (6-10 years)

Continuing/
Ongoing

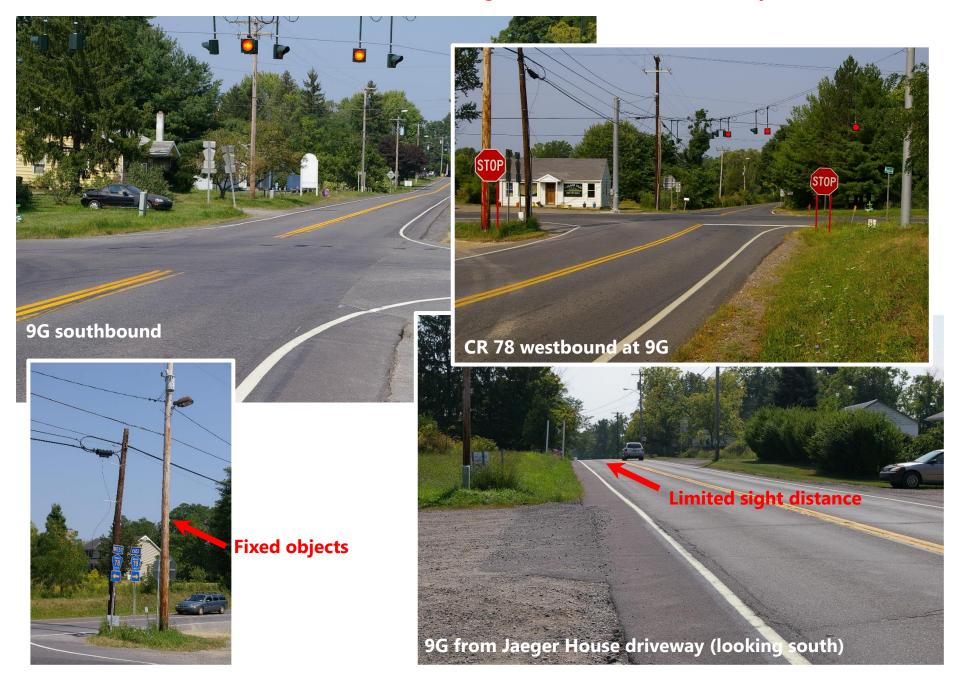




Recommendations Key Map

Route 9G at CR 78

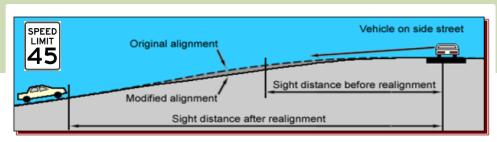
NYS Route 9G Intersection Existing Conditions: CR 78/West Kerley Corners Rd



NYS Route 9G Intersection Recommendations: CR 78/West Kerley Corners Rd

- 2-1 Improve profile and alignment of westbound CR 103 approaching 9G
- **2-2** Better delineate the intersection & slow traffic
- **2-3** Add a flashing beacon to the intersection warning sign on 9G
- 2-4 Reduce the speed limit on CR 78 approaching 9G to 45 mph
- **2-5** Improve lighting at the intersection to provide better visibility
- 2-6 Determine how effective the new flashing red signal and larger stop signs are
- **2-7** Undertake an engineering study to determine whether a full traffic signal or roundabout can be installed on 9G at CR 78
- **2-8** Evaluate the ability to improve the profile of 9G northbound approaching CR 78 (as may be required for signal installation)
- **2-9** Implement land-use planning regulations consistent with the improvements proposed for the intersection of NY 9G with CR 78





This graphic depicts how changes in the vertical alignment can affect sight distance. Even small changes in grade can have a significant impact.

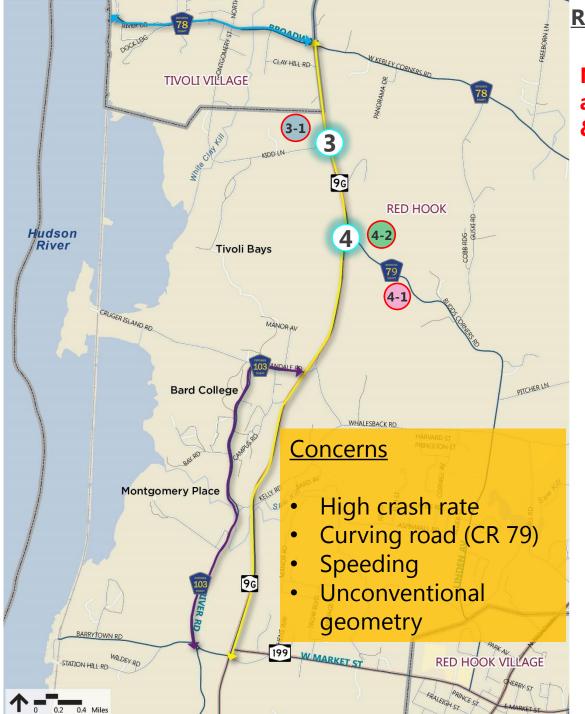
Immediate (< 1 year)

Mid-term (1-5 years)

Longer-term (6-10 years)

Continuing/
Ongoing





Recommendations Key Map

NY Route 9G at Kidd Ln. & CR 79

NYS Route 9G Intersection Recommendations: Kidd Ln

3-1 Evaluate the safe operation of the passing lane on NY 9G



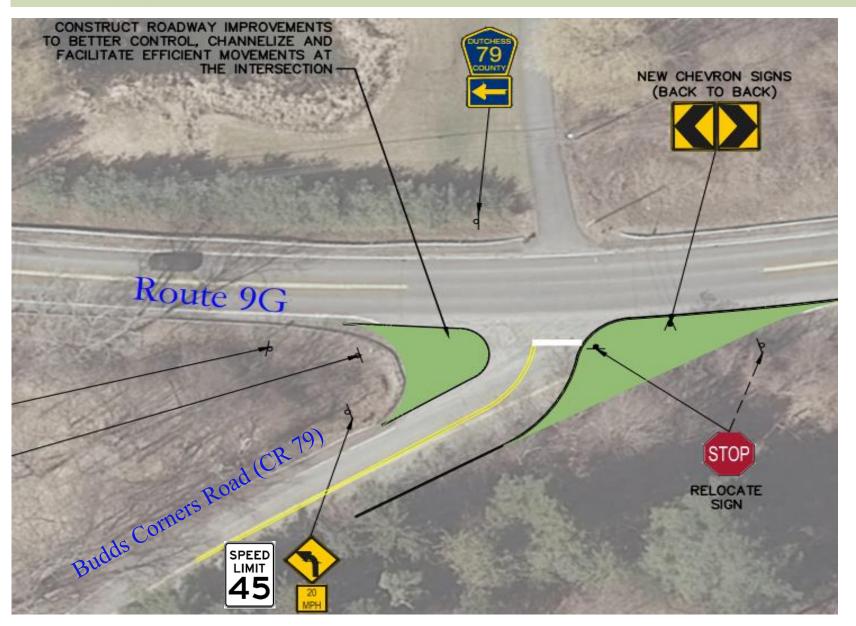
NYS Route 9G Intersection Recommendations: CR 79/Budds Corners Rd

- **4-1** Reduce the speed limit on CR 79 approaching NY 9G to 45 mph
- **4-2** Study options to make CR 79 (Budds Corners Rd.) a "T" intersection



NYS Route 9G Intersection Recommendations: CR 79/Budds Corners Rd

- **4-1** Reduce the speed limit on CR 79 approaching NY 9G to 45 mph
- **4-2** Study options to make CR 79 (Budds Corners Rd.) a "T" intersection



Immediate (< 1 year)

Mid-term (1-5 years)

Longer-term (6-10 years)

Continuing/
Ongoing





Recommendations Key Map

NY Route 9G at CR 103 & Entrance Road

NYS Route 9G Intersection Recommendations: Annandale/Old Whalesback Rd

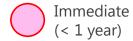
- **5-1** Study options to install a traffic signal or an RRFB along with high-visibility crosswalks
- 5-2 Install a sidewalk on Old Whalesback Road from 9G to Whalesback Road



NYS Route 9G Intersection Recommendations: Entrance Rd

- **6-1** Add directional guide signs advising motorists that they are approaching the entrance to Bard College
- **6-2** Study installation of a full signal, an RRFB or a HAWK and high-visibility crosswalks and appropriate reuse of Bard building



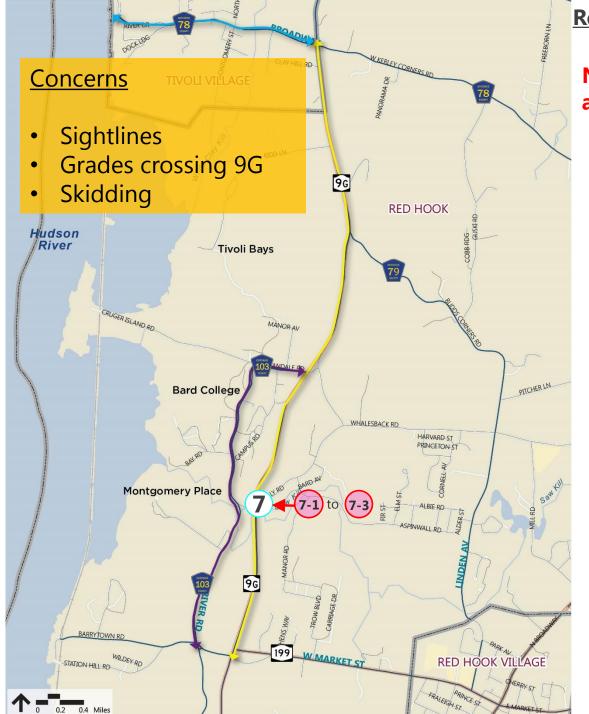




Longer-term (6-10 years)

Continuing/ Ongoing





Recommendations Key Map

NY Route 9G at Kelly Road

NYS Route 9G Intersection Recommendations: River/Kelly Rd

- **7-1** Install No Turn on Red signs facing River and Kelly roads
- **7-2** Evaluate and fix northbound skid resistance, as necessary
- **7-3** Study the need to improve the grade crossing 9G



Transit

Upper Route 9G Corridor Management Plan

Immediate (< 1 year)

Mid-term (1-5 years)

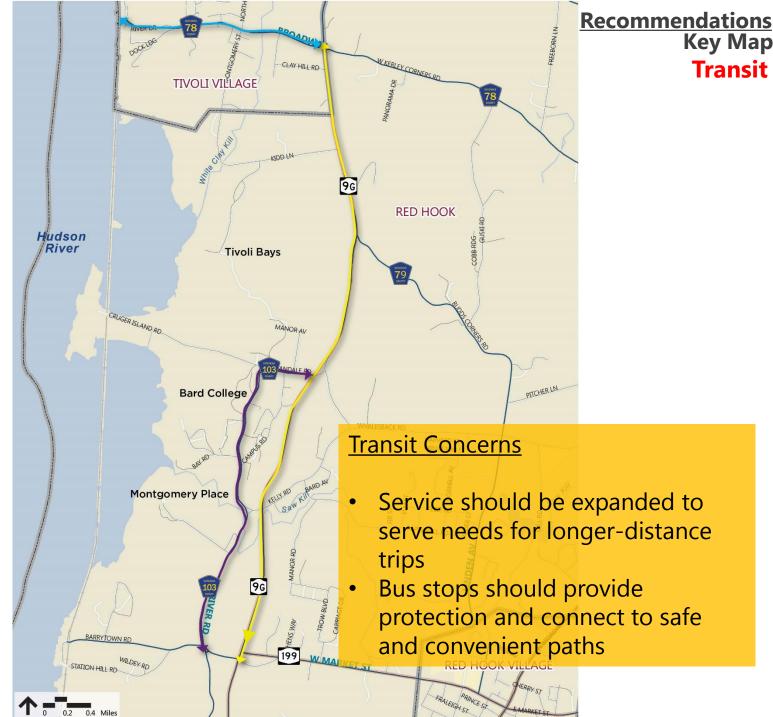
Longer-term (6-10 years)

Continuing/ Ongoing



Transit



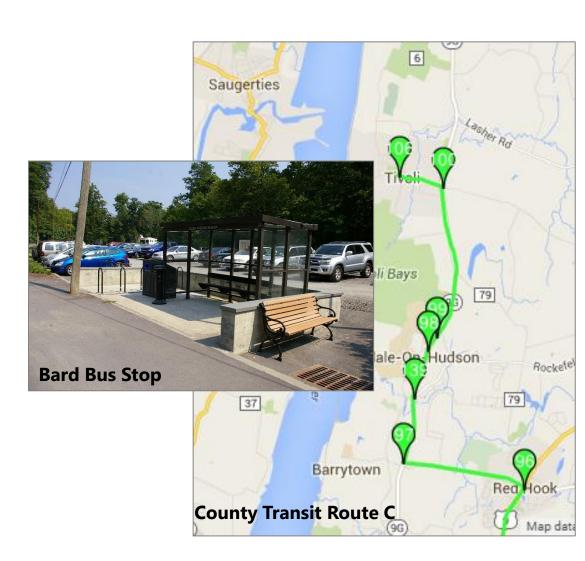


NYS Route 9G Transit Recommendations

- **T-1** Install shelters with maps and schedules at bus stops
- **T-2** Evaluate ridership levels and add/adjust service to support frequent transit use







Breakout Session

Upper Route 9G Corridor Management Plan

Contact Us

Poughkeepsie-Dutchess County Transportation Council 27 High Street, 2nd Floor Poughkeepsie, NY 12601 (845) 486-3600

Email: pdctc@dutchessny.gov

Internet: http://www.dutchessny.gov/pdctc.htm (click on 'Community Planning Initiatives; Upper Route 9G)

